U.S. Naval Air Station,
Seaplane Hangar (Building 73)
Pensacola
Escambia County
Florida

HABS No. FL-242

HABS
FLA,
17-PENSA,
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PHOTOGRAPHS

HISTORICAL AND DESCRIPTIVE DATA

Historic American Buildings Survey
National Architectural and Engineering Record
National Park Service
Department of the Interior
Washington, D.C. 20243

HISTORIC AMERICAN BUILDINGS SURVEY HABS No. FL-242

U.S NAVAL AIR STATION, SEAPLANE HANGAR

(BUILDING 73)

Location: U.S. Naval Air Station, Pensacola, Escambia County, Florida.

Present Owner: Commanding Officer.

Present Use: General warehouse.

Significance: The Seaplane Hangar is an early military aircraft maintenance and repair shop with the use of steel frame construction and corrugated asbestos walls.

PART I. HISTORICAL INFORMATION

A. Physical History:

1. Date of erection: 1916; doubled in size in 1917.

2. Architect: Not known.

3. Original and subsequent owners: The Seaplane Hangar (Building 73) has been the property of the U.S. Navy during its entire history.

4. Builder, contractor, suppliers: Construction of the Seaplane Hangar was by contract but the firm which did the work is not known.

5. Original plans and construction: The seaplane hangar (Building 73) and the other two hangars (Buildings 71 and 72) were constructed in 1916-17 at a cost of $39,914.59. Concrete paving cost $9,489, and three airplane piers approximately $6,900. Prior to the construction of Buildings 71,72, and 73, tents were used for maintenance purposes.

6. Alterations and additions: The hangar had just been completed in 1916 when plans were made to double it in size. This work was finished in 1917.

The hurricane of 1926 indicated the need for a stronger wall on the gulf side. As a result, a concrete storm wall about 6 feet high was built on the south side of the building to protect it against the wind and sea during severe storms. Damage from the 1926 storm was extensive throughout the station.

The next addition to the building came in 1940 when a toilet was built on the north side of the hangar. By 1941, this had been extended into a lean-to measuring 50' x 14' 7" x 15' 4" providing some 750 square feet of space. Most of this area is currently being used as office space.

In 1942 an automatic sprinkler system was installed and an intercommunications system was added the same year.

Following the end of World War II, in 1947, the hangar was converted into a chromatizing shop. No details were available as to the type and amount of equipment and the extent of the alterations required for the conversion.

In 1949 compressed air outlets were installed and in 1955 fluorescent lighting was added to the southeast corner.

A platform, actually a mezzanine, was added in the southeast section of the hangar in 1958. This platform measures 40' x 20' and provides an additional 800 square feet of space.

Several changes have been made to the heating system. In 1956 three 234,000 BTU steam inverted heating units were installed at a cost of $1,717.87. In 1962 a 250,000 BTU steam heater unit and fin tube heating element were added for $2,038. In 1971-72, modifications to the heating system were made by the R.N. Pyle Mechanical Contractors, Inc. Among other improvements, the hangar was connected to a central steam heating system. Cost of the work was $20,973.48.

The floor of the building was resurfaced in 1966 by K. Chavis, General Contractor, Inc., of Pensacola for $12,820. The following year, 1967, the exterior of the hangar was repainted.

Thus, throughout the 57 year history of the building, considerable alterations and repairs have been made. In spite of this, the basic interior and exterior structure have not been drastically altered except for the addition of the storm wall, platform and the lean-to on the north side.

B. Historical Context:

The hangar was used for seaplane maintenance for a number of years. However, with the advent of naval land-based aircraft the need for seaplane hangars materially decreased. The building continued to be used as an aircraft maintenance hangar, but it was necessary to tow the land-based aircraft from the airfields such as Sherman Chevalier to the hangar.

Following World War II the building was converted into a chromatizing shop, but has since been turned back into an Aircraft Overhaul and Repair Shop, a part of the Naval Air Rework Facility.

The hangars are reminders of the seaplane era and of the early naval aviation pioneers stationed at Pensacola such as Saufley, Cory, Whiting, Bronson, Chevalier, Ellyson and Sherman, after whom the naval air stations in the area were named.

Prepared by: Dr. William S. Coker
Historian
Historic American Buildings Survey
Summer 1972

Part II ARCHITECTURAL INFORMATION

A. General Statement:

1. Architectural character: The seaplane hangar (Building 73), one of three identical hangars erected in 1916 and doubled in size in 1917, reflects an early use of steel frame structures for housing the airplanes of the Navy Station's air fleet originally housed in tents. Seaplane ramps extending into the water to accommodate the aircraft were constructed in conjunction with the hangars.

2. Condition of fabric: Building 73 appears to be in good condition, but the other two hangars, 71 and 72, are beginning to deteriorate due to corrosive fumes from washing chemicals used in the buildings.

B. Description of Exterior:

1. Over-all dimensions: The building, rectangular in plan, is 100' x 144' and is one-story high.

2. Foundations: A 1917 drawing in the files of the Naval Air Station Public Works Center indicates the foundation to be poured concrete, 4' -6" wide at the base and varying in height at the discretion of the engineer in charge.

3. Walls: On the south, east, and north sides (the west side contains the hangar doors), a poured concrete wall extends 7' -2" above grade. From this point to the roof the walls are covered with corrugated asbestos 1/4" in thickness, painted light cream in color, to the edge of the roof.

4. Structural system, framing: The roof truss system is supported on vertical supports 16' on center constructed of four L beams 6" x 4" x 7/16" attached to a vertical plate 13" wide and 3/8" thick. Roof truss module system consists of two vertical L beams 2 1/2" x 2" x 1/4" with cross chords of two L beams 2 1/2" x 2" x 1/4" connected by gussett plates, 3/8" in thickness to horizontal

members of two L beams, 6" x 6" x 3/8". The roof trusses carry 7" purlins approximately 4' -6" on center.

5. Openings:

a. Doorways and doors: The main hangar doors on the west side of the building cover the entire 144' length. Four sets of sliding doors, three doors to each set, roll on 20" diameter steel wheels on tracks, two to each door. The doors are covered with corrugated asbestos, 1/4" in thickness, the same as the walls.

In the northeast corner of the building an exit door, four-light over three-panel with molded panels, exists.

b. Windows: Typical windows exist near the top of the walls and are grouped in sets of three, each window containing 9 lights. These windows are steel sash, center pivot with glazing being 12" x 18".

6. Roof:

a. Shape, covering: Two pitched roofs cover a section, 72' x 100'. Having a pitch of 1" in 12", they are covered with composition tar and gravel.

b. Gutters: A six-inch galvanized gutter on the north and south sides is attached to a narrow overhang. Four-inch galvanized downspouts carry water to the ground from three points along the roof edge. A center gutter at the junction of the pitched roofs also exists.

c. Vents: Circular roof vents of galvanized steel, 24" in diameter, exist on the roof.

C. Description of Interior:

1. Floor plan: Basically, the entire hangar space is still one large space used for the repair and maintenance of aircraft parts and equipment. A small mezzanine in the southeast corner sits approximately 21' -3" above the floor. It is divided into a storeroom and office, each 18' x 19' in size with a 3' -6" gallery on the west side that overlooks the work area below.

2. Stairways: The stairway to the mezzanine, 30" wide, rises 34 risers in a straight run, with 8" risers and 8" treads. The handrail and its supports are of 1 1/2" x 3 1/2" lumber.

3. Flooring: The floor of the hangar is poured concrete, 4" in thickness, while the mezzanine floor is 2 1/2" board.

4. Wall and ceiling finish: Interior walls, the inside of the asbestos siding, painted a silver color, are the same as the ceiling which is the exposed steel framing of the roof trusses.

5. Notable hardware: The cast-iron equipment used to open the center pivot windows from the ground floor is unique in its character.

6. Mechanical equipment:

   a. Heating: There are cast-iron steam radiators in the building supplied by the central steam heating plant.

   b. Lighting: The lighting is modern fluorescent.

D. Site:

1. General setting and orientation: The long axis of the building is oriented north and south with the hangar doors opening to the west and facing Building 27 (HABS No. FL-247). North of the hangar is a small building used by the Police Department. East of the structure lie the two other identical seaplane hangars. On the south is the seawall on Pensacola Bay with the two concrete seaplane ramps. The entire area around the building is paved with asphalt.

Prepared by: John A Sanderson
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Summer 1972

PART III. SOURCES OF INFORMATION

A. Original Architectural Drawings and other records:

Measured drawings, floor plans and index cards indicating architectural, mechanical, electrical and general work on the Sea Plane Hangar in Engineering Department, Public Works Center, NAS Pensacola, Florida. Records are basically World War I to present.

Measured drawings, floor plans, Navy Yard maps in Bureau of Yards and Docks Plan Files, Navy Department, on microfilm, copy in Old Military Records Branch, National Archives, Washington, D.C. Index (16 mm.) see last part of Reel 13 and first part of Reel 14. Drawings, etc. of Naval Air Station are numbered 800-1-1 through 800-45-407, Reels 641 through 648.5 (35 mm.). Records from about 1829 to end of World War II.

B. Early Views:

There are three old viewe of the Seaplane Hangar in the photographic file of the Naval Aviation Museum, NAS Peneacola, Florida. (1) View from observation tower looking west but the building cannot be well seen in the photograph, although it is in its World War I camouflage suit. The picture is dated 8 October 1918, negative #010015; (2) Aerial view of the Naval Air Station showing all three hangars camouflaged, taken 1 August 1919, negative #010011; (3) 1933 view taken from some dietance, negative #010026.

C. Bibiography:

1. Primary and unpublished eourcee:

Building Property Recorde, Plant Account Office, Public Works Center, Naval Air Station, Pensacola, Florida.

2. Secondary and publiehed sources:

U.S. Navy. Annual Reports of the Navy Department. Washington, D.C. 1916--

PART IV. PROJECT INFORMATION

The project was undertaken by the Historic American Buildinge Survey (HABS) under joint sponsorship of the National Park Service, The American Revolution Bicentennial Commission of Florida, and the Historic Pensacola Preservation Board. Measured and drawn during the summer of 1972 under the direction of John Poppeliers, chief of HABS, by: Rodd L. Wheaton (Architect, HABS), June Project Supervisor; John A. Sanderson (Universtiy of Florids), July-Auguet Project Supervisor; Dr. William S. Coker (University of West Florida), Historian; John M. Szubski (Princeton University), Architect; and by Student Assistant Architects: J. Tucker Bishop (Univerity of Texas Austin); John C. Hecker (University of Illinois, Urbana) and Scott A. Kinzy (University of Nebraska) at the United States Air Station, Pensacola, Florida. Susan McCown, a HABS staff historian in the Washington, D.C. office, edited the written descriptive and architectural data in the fall of 1980. Jack Boucher, a HABS staff photographer, took the documentary photographs in March of 1974.